

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

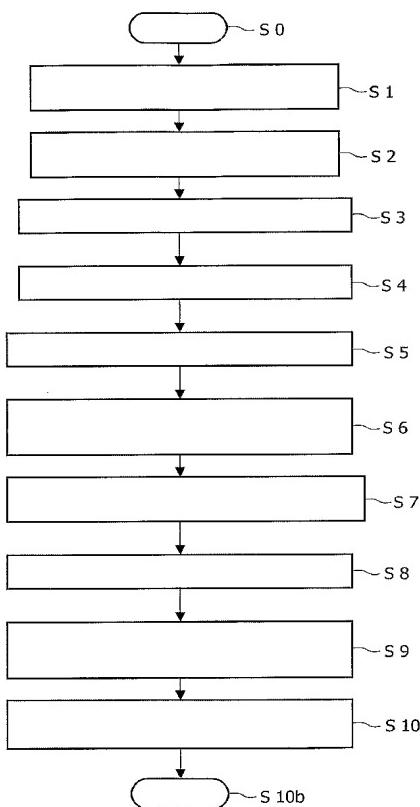
PCT

(10) International Publication Number
WO 2005/088543 A1

- (51) International Patent Classification⁷: **G06T 11/00**
- (21) International Application Number: PCT/IB2005/050655
- (22) International Filing Date: 23 February 2005 (23.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
04100827.7 2 March 2004 (02.03.2004) EP
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

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(54) Title: MOTION COMPENSATION



(57) Abstract: Using only projection data in one temporal gating window around a certain target phase point may lead to motion artifacts such as blurred images. By using projection data corresponding to three temporal gating windows, which are slightly shifted with respect to each other but at least partially overlap, motion within the gating window may be estimated and, according to an exemplary embodiment of the present invention, this estimation may be used for improving the image quality. Advantageously, only the projection data inside the at least partially overlapping gating windows are used for reconstruction and motion compensation.

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MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

Published:

— with international search report

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